



Quick Reference Guide Desktop Graphics Solutions



Feature Overview

				Feature Overview																																								
				Key Technologies													Graphics						Video				Display & Connectivity																	
				Designed for DirectX [®] 10.1 (SM 4.1)	Designed for DirectX [®] 10 (SM 4.0)	Designed for DirectX [®] 9 (SM 3.0c)	AGP Support ⁴	PCI Express [®] 2.0 support	ATI Avivo [™] (1)	ATI Avivo [™] HD (1)	Unified Video Decoder (UVD)	ATI CrossFire [™] -ready	ATI CrossFireX [™] -ready	ATI Hybrid Graphics Ready	Built-in HDMI with 5.1 Audio ⁽²⁾	ATI PowerPlay [™] Energy Saving Technology	Unified Shader Architecture	Memory Interface (max.)	Max. Frame Buffer Size	Stream Processing Units	Pixel / Vertex Shader Units	Up to 24x Custom Filter AA	Silent Cooling Versions available	High-quality DVD playback	Blu-ray [™] / HD DVD 1080p Decoding	Built-in HDMI (with HDCP) ^(3,4)	Free ATI Avivo [™] Video Converter ⁽³⁾	Capable Video Output Resolution ⁽³⁾	Dual-Display Support	Digital LCD Support	Dual-Link DVI with HDCP ⁽⁴⁾	Integrated DisplayPort [™] Support	10-bit Display Engine	Max. Resolution Analog	Max. Resolution Digital	HDTV-Out (VPRb)	5.1 Surround Audio Output	HDMI Connectivity via DVI-HDMI Adapter ⁽²⁾	Driver and System Control					
	Segment	Product	Best suitable for																																									
ATI Radeon [™] HD 3000 Series	Ultimate	ATI Radeon HD 3870 X2	Ultimate Gamer, Technology Enthusiast	•	•	•	•	•	•	•	•	•	•	•	•	•	•	2x 256-bit	1GB	2x 320		•	•	•	•	•	1080p	•	•	•	•	•	•	2048x1536	2560x1600	•	•	•	ATI Catalyst Control Center [™]					
	Performance	ATI Radeon HD 3870	Power Gamer, Technology Enthusiast	•	•	•	•	•	•	•	•	•	•	•	•	•	•	256-bit	1GB	320		•	•	•	•	•	1080p	•	•	•	•	•	•	2048x1536	2560x1600	•	•	•						
		ATI Radeon HD 3850	Gaming & Video Enthusiast	•	•	•	•	•	•	•	•	•	•	•	•	•	•	256-bit	1GB	320		•	•	•	•	•	1080p	•	•	•	•	•	•	2048x1536	2560x1600	•	•	•						
	Mid-Range	ATI Radeon HD 3650	Gaming & Video Enthusiast	•	•	•	•	•	•	•	•	•	•	•	•	•	•	128-bit	512MB	120		•	•	•	•	•	1080p	•	•	•	•	•	•	2048x1536	2560x1600	•	•	•						
		ATI Radeon HD 3470	Advanced PC User, Casual Gamer	•	•	•	•	•	•	•	•	•	•	•	•	•	•	64-bit	512MB	40		•	•	•	•	•	1080p	•	•	•	•	•	•	2048x1536	2560x1600	•	•	•						
	Entry-Level	ATI Radeon HD 3450	Advanced PC User, Casual Gamer	•	•	•	•	•	•	•	•	•	•	•	•	•	•	64-bit	512MB	40		•	•	•	•	•	1080p	•	•	•	•	•	•	2048x1536	2560x1600	•	•	•						
ATI Radeon [™] HD 2000 Series	Performance	ATI Radeon HD 2900 XT	Power Gamer, Technology Enthusiast	•	•	•			•		•					•	•	512-bit	1GB	320		•	•	•	•	•	1080p	•	•	•	•	•	•	2048x1536	3800x2400	•	•	•	ATI Catalyst Control Center [™]					
		ATI Radeon HD 2600 X2	Power Gamer, Technology Enthusiast	•	•	•			•	•	•					•	•	2x 128-bit	2x 512MB	2x 120		•	•	•	•	•	1080p	•	•	•	•	•	•	2048x1536	2560x1600	•	•	•						
	Mid-Range	ATI Radeon HD 2600 XT	Gaming & Video Enthusiast	•	•	•			•	•	•					•	•	128-bit	512MB	120		•	•	•	•	•	1080p	•	•	•	•	•	•	2048x1536	2560x1600	•	•	•						
		ATI Radeon HD 2600 PRO	Gaming & Video Enthusiast	•	•	•			•	•	•					•	•	128-bit	512MB	120		•	•	•	•	•	1080p	•	•	•	•	•	•	2048x1536	2560x1600	•	•	•						
	Entry-Level	ATI Radeon HD 2400 XT	Advanced PC User, Casual Gamer	•	•	•			•	•	•					•	•	64-bit	512MB	40		•	•	•	•	•	1080p	•	•	•	•	•	•	2048x1536	2560x1600	•	•	•						
		ATI Radeon HD 2400 PRO	Advanced PC User, Casual Gamer	•	•	•			•	•	•					•	•	64-bit	512MB	40		•	•	•	•	•	720p	•	•	•	•	•	•	2048x1536	2560x1600	•	•	•						
ATI Radeon [™] X1000 Series	Performance	ATI Radeon X1950 XT	Power Gamer, Technology Enthusiast		•	•		•			•							256-bit	256MB		48/8			•		•	1080p	•	•	•	•	•	•	2048x1536	2560x1600	•			ATI Catalyst Control Center [™]					
		ATI Radeon X1950 PRO	Gaming & Video Enthusiast		•	•		•			•							256-bit	256MB		36/8			•		•	1080p	•	•	•	•	•	•	2048x1536	2560x1600	•								
	Mid-Range	ATI Radeon X1950 GT	Gaming & Video Enthusiast		•	•		•			•							128-bit	512MB		24/5			•		•	1080p	•	•		•	•	•	2048x1536	1920x1200	•								
		ATI Radeon X1650 PRO	Gaming & Video Enthusiast		•	•		•			•							128-bit	256MB		12/5			•	•	•	720p	•	•		•	•	•	2048x1536	1920x1200	•								
	Entry-Level	ATI Radeon X1550	Advanced PC User, Casual Gamer		•	•		•			•							64/128-bit	256MB		8/4			•	•	•	720p	•	•		•	•	•	2048x1536	1920x1200	•								
		ATI Radeon X1050	Advanced PC User, Casual Gamer		•	•												64/128-bit	256MB		4/2			•	•	•	720p						•	2048x1536	1920x1200	•								

* ATI Radeon HD 3870 GPUs support PCIe 2.0. Some third party board configurations may not fully comply with complete PCIe 2.0 specification and operate at PCIe 1.1 specifications on motherboards that support PCIe 2.0. Please consult with board manufacturer if this is an important feature for you.

** Dual-Link capable with one HDCP key only. Playing HDCP content requires additional HDCP ready components, including but not limited to an HDCP ready monitor, Blu-ray or HD DVD disc drive, multimedia application and computer operating system.

1) ATI Avivo[™] and ATI Avivo HD are technologies that include a broad set of capabilities offered by certain ATI Radeon[™] GPUs. Not all products have all features and full enablement of some capabilities may require complementary products.

2) May not support all HDMI displays. Please visit AMD Customer Care at ati.amd.com for more information.

3) 1080p output requires 1080p HD capable display for 1080p capable graphics products.

4) Playing HDCP content requires additional HDCP ready components, including but not limited to an HDCP

ready monitor, Blu-ray or HD DVD disc drive, multimedia application and computer operating system.

5) Indicated ATI Radeon GPUs support AGP. Not all board manufacturers may manufacture AGP boards. Please consult with board manufacturers if this is an important feature for you.

6) 10-bit display required.

7) ATI Hybrid Graphics requires a compatible AMD 7-Series Integrated Chipset-based motherboard and an ATI Radeon HD 3400 Series GPU-based graphics card.

ATI Radeon HD graphics chips have numerous features integrated into the processor itself (e.g., HDCP, HDMI, etc.). Third parties manufacturing products based on, or incorporating ATI Radeon HD graphics chips, may choose to enable some or all of these features. If a particular feature is important to you, please inquire of the manufacturer if a particular product supports this feature. In addition, some features or technologies may require you to purchase additional components in order to make full use of them (e.g. a Blu-ray or HD-DVD drive, HDCP-ready monitor, etc.).

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